

## ABSTRACT

A graphical user interface together with a comparable scripting interface couples a plurality of finite element, finite volume, or finite difference analytical programs and permits iterative convergence of multiple programs through one set of predefined commands. The user is permitted to select the joint problem for solution by choosing program selections. Data linkages that couple the program are predefined by an expert system administrator to permit less skilled modelers access to a comprehensive and multifaceted solution that would not be possible for the less skilled modelers to complete absent the graphical user interface.